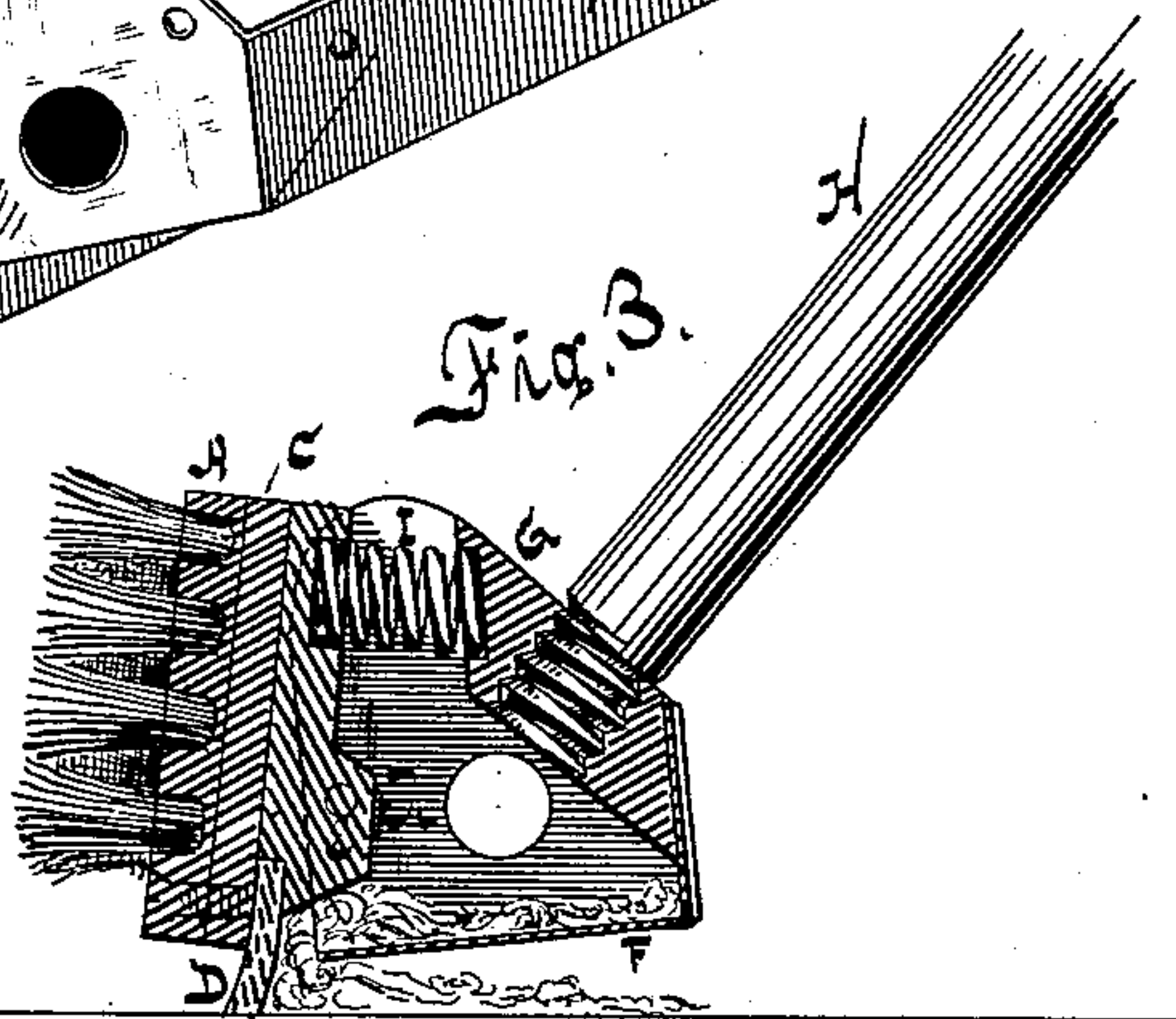
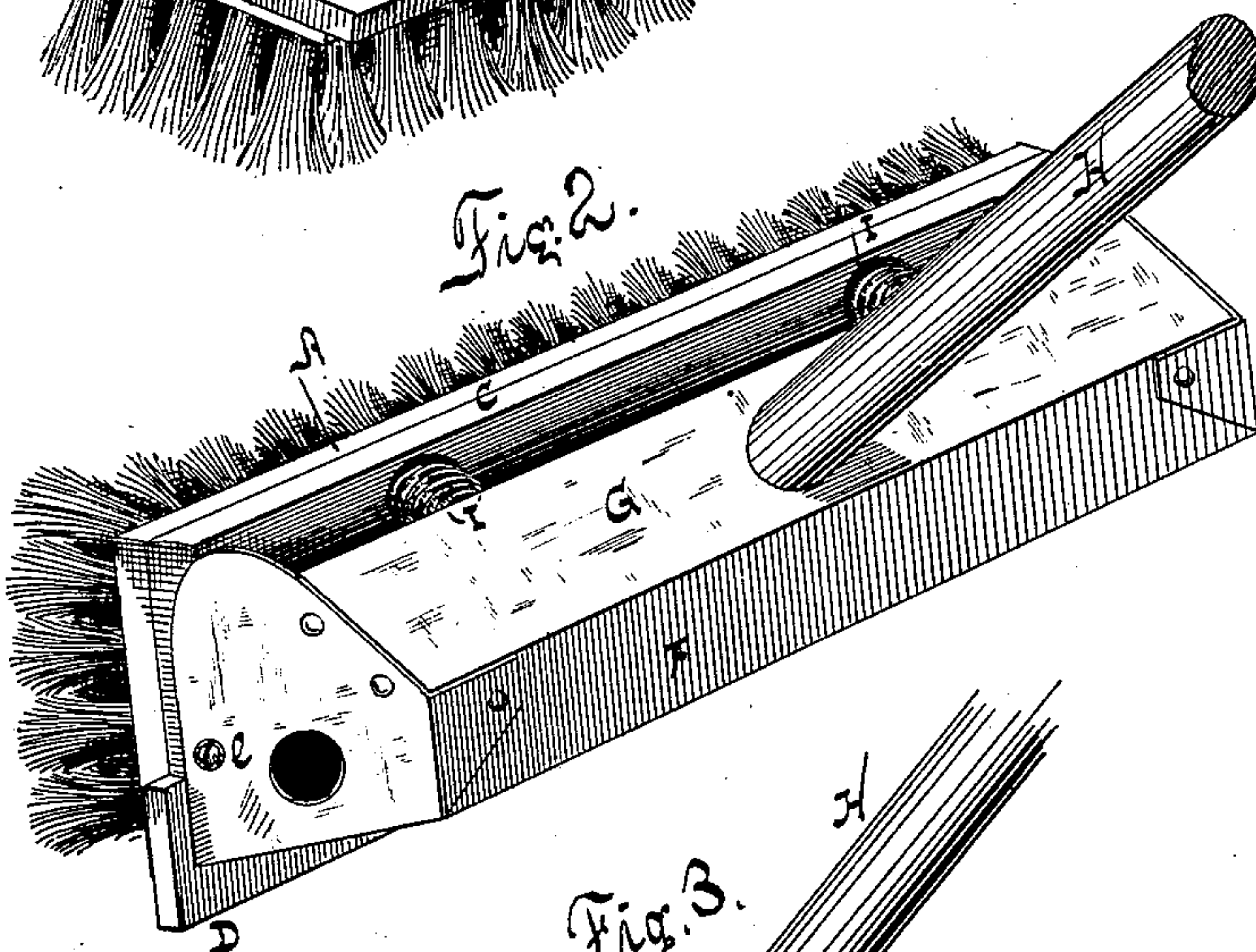
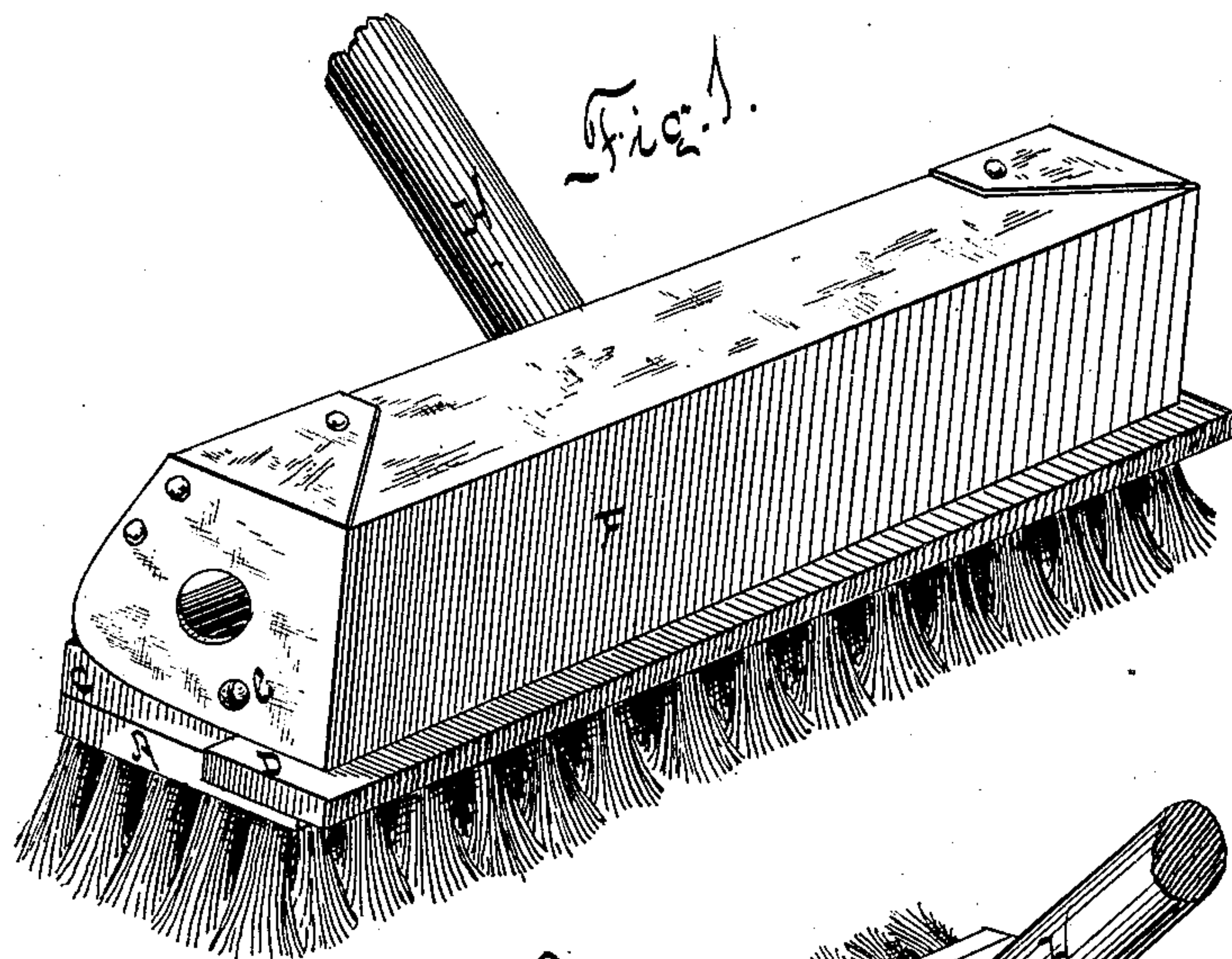


F. A. BALCH.
Floor-Scrubber.

No. 206,212.

Patented July 23, 1878.



WITNESSES:

Mrs. Augusta G. H. Smith.
Isabella S. Post.

INVENTOR:

F. A. Balch By his atty
R. W. Smith

UNITED STATES PATENT OFFICE.

FREDERICK A. BALCH, OF HINGHAM, WISCONSIN.

IMPROVEMENT IN FLOOR-SCRUBBERS.

Specification forming part of Letters Patent No. 206,212, dated July 23, 1878; application filed April 5, 1878.

To all whom it may concern:

Be it known that I, FREDERICK A. BALCH, of Hingham, in the county of Sheboygan and State of Wisconsin, have invented a new and useful Improvement in Floor-Scrubbers; and that the following is a full and clear description of the same, having reference to the accompanying drawing, wherein—

Figure 1 is a perspective of my improved scrubber with the brush in action. Fig. 2 is a perspective view of the same, showing the rubber in action. Fig. 3 is a transverse section, showing the action of gathering the water from the floor.

In scrubbing floors, efficiency requires the use of both brush and rubber and means for ready removal of the free water from the floor.

My implement is designed to obviate the necessity of kneeling upon the floor and the employment of the traditional soap and sand with the hand-brush, and also the tedious process of removing the free water with the mop-cloth; and to that end I have, in the same implement, (mounted upon the end of a suitable handle,) combined a scrub-brush and a rubber, of india-rubber or other suitable material, with a water-pan, within which nearly or quite all the free water may be gathered from the floor.

I am aware that scrub-brushes have heretofore been mounted upon handles, and also that rubbers of india-rubber have also been so mounted; but I am not aware of a brush, rubber, and water-pan combined in one structure and mounted upon the same handle. I believe, also, that the structure of the several parts is new.

That others may fully understand my improvement, I will particularly describe it.

A is the brush, with the tufts of bristles set therein in the usual way. One edge of the back of A is wider than the other, to facilitate the attachment of the scrubber-back C, which is secured to the brush-back by screws. One edge of the back of the brush A extends down over a portion of the rubber strip, securely holding it in place.

A rabbet is made in the scrubber-back C, on one side, for the reception of the scrubber

D, which consists of a strip of vulcanized india-rubber, or other suitable material, and a rib, *d*, is made longitudinally along the central part of the opposite side of said back C. This rib is for the purpose of strengthening the back and offering a strong abutment for the pivot-pins *e e*, whereby the backs A and C are attached to the water-pan F and block G, into which the handle H is inserted.

The water-pan F is constructed of galvanized sheet-iron, or other suitable material, folded and bent so as to form two sides and two ends of the water-pan, as shown. The front edge is made straight and close against the side of the rubber strip or scrubber D, and thereby forms a tight joint.

The end parts of the back are nailed to the block G, which gives it strength and stiffness, and is provided with a socket for the end of the handle H.

Two strong spiral springs, I I, placed between the back edge of the block G and the edge of the back C, keep the whole structure firm and the front edge of the water-pan F tightly closed against the rubber strip D; but said springs may be caused to yield by a backward movement of the implement with the edge of the scrubber pressed hard down upon the floor. The pan F is thereby opened, so that the water accumulated behind the rubber, by the movement described, will be caused to flow over into the pan, as shown in Fig. 3.

The cessation of the pressure described will cause the pan to close, and the water will be retained.

The hole *i* serves for the discharge of the inclosed water in the bucket or other receptacle.

The ordinary use of the scrubber or rubber is by pushing, and that movement tends to close the pan more tightly against the rubber D; but a pulling backward, together with a downward pressure, has the effect of opening the pan and causing the water to flow in, as above described.

Having described my invention, what I claim as new is—

1. The brush A, with one edge of its back extended, as described, and the rabbeted back

C, provided with a rib, *d*, and rubber D, combined with the pivoted water-pan F, substantially as set forth.

2. A water pan or box, essentially triangular in cross-section, one side whereof is composed of a scrub-brush and india-rubber floor-rubber, pivoted to said pan, and a handle

projecting from another side, with suitable springs to close the edge of said pan against the rubber, as set forth.

FREDERICK A. BALCH.

Witnesses:

MARTIN McDONALD,
H. MOORE, Jr.